

Cooperation in Private Forestry of Post-Soviet System: Forest Owners' Cooperatives in Lithuania

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The current state of cooperation in private forestry in Lithuania is examined, with a focus on the analysis of objectives, organisational structure and the ways forest owners' cooperatives operate. A postal survey has been used as a main research instrument, the questionnaire consisting of a series of multiple-choice close-ended questions. This paper provides insights into the state forest enterprises and other private companies operating in the private forestry sector, and places forest owners' cooperatives in a broader context of the private forestry sector. A typical forest owner's cooperative in Lithuania has up to 10 members and about 20 clients to whom services are provided. The leaders of cooperatives indicate that the optimal number of clients using their services should not exceed 40. The main stated objectives of cooperatives are the provision of services to their members under the most attractive conditions, uniting members, and earning a profit for the members. These activities of cooperatives revolve around timber harvesting and trade. It is concluded that the process of cooperation of private forest owners in Lithuania is rather slow, although positive development can be observed.

Keywords: cooperation, private forest owners, private forestry, Baltic States, elite

INTRODUCTION

Privatisation of natural forests through the transfer of land or forest ownership during the last decades worldwide was less marked compared to the transfer of ownership rights to planted forests and protected forest areas (FAO 2005). However, these trends varied across regions, with privatisation of natural forests and woodlands as the most dominant form of forest sector restructuring in Central and Eastern Europe. Here, this process is an act of property expropriated by the former regimes being returned to the former owners (UN ECE and FAO 2005, FAO 2005).

In addition to the shift in forest ownership from public to private in many of the Central and Eastern European countries, policies have changed with respect to the management of forests that remain in the public domain (MCPFE 2002, Jansky *et al.* 2004). Many European countries have reorganised their state forest management organisations to function as quasi-private companies, with commercial objectives and a high degree of operational freedom (UN ECE and FAO 2005). These companies became more efficient, with a more entrepreneurial spirit, and therefore now require a clear definition of which public goods and services they should supply and on what terms (UN ECE and FAO 2005).

Privatisation, or restitution, has resulted in a large number of new forest owners, who hold relatively small areas of forest and are inexperienced in forest management, business or market economies (FAO 2005). In addition, private forest owners (PFOs) in Europe in general seem to be increasingly unable to manage their forests in a rational way and to handle the complex and public dilemmas (UN ECE and FAO 2005).

Lithuania, along with the two other Baltic States (Estonia and Latvia), is a country where both dimensions of privatisation – restitution of forestland and reorganisation of state forestry – were employed (Carlsson and Lazdinis 2004, Lazdinis and Herbst 2004). As a result, private forestry in general is ranked among the most important problem areas in forest sectors of the Baltic States. Lithuania, along with the other two Baltic States, reports on the lack of organisational structures to carry out forestry over private forest holdings, and on the lack of information on legal requirements and recommended forestry activities (Lazdinis *et al.* 2005a). Private forest owners in Lithuania lack information on forests and forest management, face extensive bureaucracy and need assistance in protecting their forests from fires, diseases and timber thieves (Pivoriūnas and Lazdinis 2004).

Cooperation between private forest owners and promotion of consolidation of forest holdings may be seen as a logical step to address the emerging problems after privatisation of forests has taken place (World Bank 2001, Siry 2003). Conceptually, cooperatives might provide access to the markets for individuals who would otherwise have been denied such access, with possible benefits for both the individual member and the market to be a reliable source of supplies during the periods of timber shortages (Barton 1989, World Bank 2001). According to the Confederation of European Forest Owners (CEPF 2005), it is mainly the co-operation through forest owners' associations (or cooperatives) that enables the individual family forest owners to be well-informed and participate actively in the wood market. According to the same source, forest owner's associations (or cooperatives) are a keystone in the dissemination of information and may lead to a successful implementation of policies.

The objective of this study is to describe the current state of cooperation in private forestry in Lithuania, analysing the objectives, organisational structure and the ways of operating of forest owners' cooperatives (FOCs), and placing FOCs in a context of the private forestry sector. Institutionalised cooperation of PFOs in Lithuania is a new phenomenon. State Forest Enterprises (SFEs) also only recently commenced providing commercial forestry services to PFOs. Several large companies have emerged on a national scale with primary objectives of operating in private forestry as well.

This paper first outlines the history of cooperation development in agriculture and forestry in Lithuania, which sets a broader cultural and traditional stage for recent cooperative developments. Then, after presenting the research methods, synthesised results of the study are used to describe how the FOCs work and under what objectives. The paper concludes with the presentation of a profile of a typical forest owners' cooperative in Lithuania and a discussion on the development and importance of forest management through cooperation.

DEVELOPMENT OF COOPERATION IN AGRICULTURE AND FORESTRY IN THE BALTIC STATES, AND LITHUANIA IN PARTICULAR

Development of institutionalised cooperation in the agricultural sector of Lithuania and of the Baltic States in general has at least century-old traditions. It commenced with the independence period between World War I and World War II, continued in a different form throughout the Soviet rule and re-emerged under the market conditions since Lithuania regained independence in 1990. As there is no available information specifically on cooperation of private forest owners, and because forestry is often considered as closely related to the agricultural activities, traditions in agricultural cooperation in this section are considered applicable to forestry as well.

In 1920, 79% of Lithuanians worked in the agricultural sector. This figure was 66% and 58% in Latvia and Estonia respectively (Lieven 1994). The agricultural sector, so important to society, was highly fragmented and dominated by small landholdings. In Estonia in 1939 about 80% of the total number of farms had an area of between 1 ha to 30 ha (Raun 1991). In Latvia, around that period, farms smaller than 30 ha constituted 83.4% of all farms (Bilmanis 1947). In 1930, Lithuanian agriculture was dominated by small and medium-size farms. Peasants with 10-20 ha farms owned 30% of the land and constituted 32.3% of all farms (Eidintas *et al.* 1997). Peasants with 30-100 ha of land owned 27.5% of the land and comprised 9.4% of all farms. The importance of agricultural sectors to national economies and its fragmentation attracted state support to cooperation. Land improvement societies were created after World War I in Latvia and enabled the individual farmers to take part in common improvement work. There were 2,300 such societies in 1939, with 70,000 members (Bilmanis 1947). In 1937, Latvia had 503 credit and savings cooperative associations, 448 mutual insurance societies, 184 consumer's cooperative associations, 258 cooperative dairies and 228 agricultural machinery cooperative associations (Bilmanis 1947). A number of agricultural cooperatives was also created in Lithuania – among more than 2,000 of them, 640 were

consumer's societies, 473 dairy cooperatives, and 587 credit cooperatives (Eidintas *et al.* 1997).

The principles of cooperation have changed since the annexation of the Baltic States to the Soviet Union at the end of the World War II. Collective farming as part of the centralised planning was one of the main features of the Soviet economy (Litvin 1987, Gardner 1997). One of the most influential policy factors affecting Soviet agricultural performance was that farm managers and workers were not given the opportunity to direct their skills, knowledge and capacities to efficient farming (Johnson 1983). The efficiency of farmers was below that of developed countries (Hutchings 1982).

Cooperation in agriculture and forestry was rather slow after the restoration of Lithuanian independence in 1990, largely due to a negative experience such as in the Soviet Union (Čaplikas and Ramanauskas 2001, Pivoriūnas 2004). The main act regulating activities of cooperatives is the *Law on Cooperative Societies*, according to which members of a cooperative must be at least five persons, citizens of the Republic of Lithuania and at least 16 years old, or legal persons registered in Lithuania. Currently, the Chamber of Agriculture of the Republic of Lithuania unites over 100 organisations, including 17 from the crop sector, 22 for animal husbandry, 25 professional and cultural organisations, and 40 regional farmers' associations (Chamber of Agriculture 2005).

An even slower trend in cooperation may be observed in the forest sector. The first FOC in Lithuania was established in 1997. In 2004, there were only 15 FOCs in Lithuania, despite a rapid growth in a number of private forest owners and area of private forests (Figure 1). The majority of the FOCs are united under the umbrella of the Lithuanian Forest Owners' Association. Detailed information on the institutional context of the Lithuanian forest sector may be found in Mizaraite (2001), Mizaras and Mizaraite (2004) and Lazdinis *et al.* (2005b). A second association uniting private forest owners in Lithuania (Private Forest Owners' Association) was established in 2003.

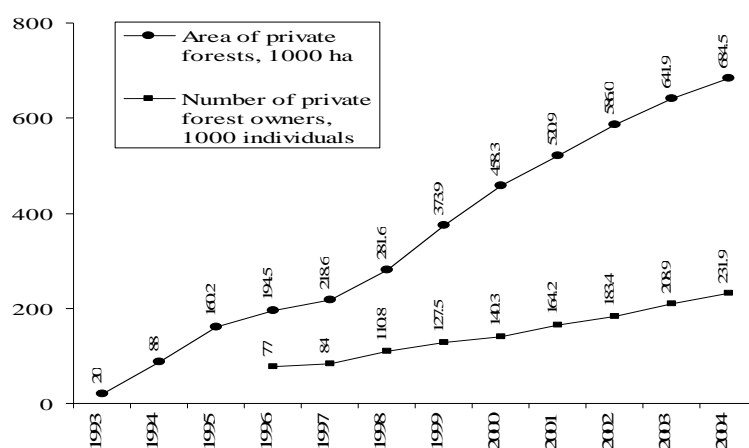


Figure 1. Change in the area of private forests and the number of private forest owners in Lithuania during the period of 1993-2004

RESEARCH METHOD

This study seeks to describe the current state of cooperation in private forestry in Lithuania and to place forest owners' cooperatives (FOCs) in a broader context of the private forestry sector. In order to pursue these objectives, a case study approach has been used as a research strategy, following the methodology described by Yin (1992, 1994). The private forestry sector in Lithuania is a relatively recent phenomenon and presents an interesting opportunity to study the issues resulting from the restitution of forests, about which little information exists. To facilitate this, a descriptive case study was designed in which the objectives, organisational structure and the ways of operating of FOCs in Lithuania could be analysed and compared with those of other companies operating in private forest sector.

A postal survey was used as a main research instrument for collecting information. The questionnaire comprised mainly multiple-choice questions. The close-ended format of questions was used to achieve the highest possible levels of standardisation. The questions were structured around the two main topics, namely objectives and organisational structure of the entity, and ways of operating. The questions were formulated based on the information acquired from the previous studies as well as on the experience of the authors. Background and demographic questions were included.

The elite members (or leaders and experts) in relation to a research topic are typically addressed when there is little or no written information or where quantitative information is difficult to obtain (Patton and Sawicki 1993). Due to the rapid changes in the forest sector in Lithuania, up-to-date and comprehensive information is difficult, if not impossible, to find. Therefore, the opinions of the elite become a valuable source of information in this study. The questionnaire was distributed to the leaders (elite) of 15 FOCs. Each FOC received a letter addressed to the leader and providing the description of the research interests, along with a request to complete the questionnaire and return it using a stamped return envelope. Detailed instructions on how to complete the questionnaire were included, and the need for accuracy in answering the survey questions was highlighted. Also, the respondents were assured of anonymity regarding their responses.

The same procedure, using a slightly adjusted questionnaire, was followed to collect information on the objectives and functioning of other companies (both state and private) operating in the private forest sector. SFEs are the state-owned forestry companies trusted with the management of state forests. There are 42 SFEs with the average area of forests under management of an individual SFE of about 23,500 ha. Generally, SFEs have a mandate also to participate in private forestry activities by providing a variety of services, such as land preparation, timber harvesting and transportation, and coordination of fire prevention and fire-fighting activities. Several large companies (e.g. StoraEnso Lithuania) have emerged on a national scale with primary objectives of functioning in private forestry as well. The questionnaire was distributed to the leaders (elite) of 20 SFEs and other companies. The interviewees were selected on a geographical basis in order to cover the regions where FOCs are operating.

The survey was completed in early 2004. Data collected were synthesised and are presented in the section below. A comparison of the two sets of entities (FOCs

versus SFEs and other companies) was made in order to outline the specific features of the FOCs in Lithuania.

FOREST OWNERS' COOPERATIVES AS A MEANS FOR COOPERATION

In total, 25 questionnaires were returned. Thirteen out of 15 leaders of FOCs responded, yielding a response rate of 87%. Twelve leaders of state and private forestry companies (seven from SFEs, five from other forestry companies) completed and returned the questionnaire. Eight leaders of forestry companies chose not to participate in the survey, resulting in a response rate of 60%.

Background and Demographic Questions

The age of the survey respondents ranged from just under 30, up to 60 years, the greatest concentration (nine out of 25) being in the age group 30-39 years. Leaders of forestry companies who responded in the survey were in general older than leaders of the FOCs. Only two of 13 FOC leaders were over 40 years old, compared to the eight out of 12 leaders of forestry companies. The majority of the respondents were male (23 individuals). Twenty-one respondents had a university degree, and four had college-level education. Twenty-two respondents had forestry education.

All FOCs for which the leaders participated in the survey were created after 1997. The majority of FOCs (seven out of 13) started operating relatively recently – in 2002. Most of the SFEs were established before World War II and reported the pre-World War II period as the first years in service, although some SFEs and other companies reported having started providing services to PFOs only in the 1990s.

Objectives and Organisational Structure

The vast majority of the respondents to the survey (92.3% and 91.7% of the FOCs and forestry companies respectively) view their companies as profit oriented. The FOCs indicated provision of services to their members under the most attractive conditions, followed by uniting their members and earning the profit for them, as their main objectives (Table 1). SFEs and other forestry companies, on the other hand, prioritise maintenance and management of forest holding as their main objective, followed by the provision of services to the clients under the most attractive conditions.

The main commercial decisions in eight FOCs are taken by the director, and in four FOCs by the board. One member has one vote on major decisions in a FOC (13 responses). FOC members have a right to vote on management activities in seven FOCs (no right in five, while one provided no response on this issue).

Seven out of 13 FOCs reported having another legal entity as their member. Seven of the interviewed leaders also indicated that a legal entity would be welcomed as a member in the future. Six FOCs have from 6 to 10 members, four FOCs up to 5, and two from 11 to 20; none has more than 20 members. Four FOCs have members who are not forest owners. Four FOCs reported that their number of members increased over the last year, eight stated that the number remained constant. Nine leaders of the FOCs believe that the optimal number of the members in a FOC should be in a range of 5 to 40; four believe that it should be over 40.

Seven leaders of forestry companies believe that the optimal number of the members in a FOC should be over 40.

Table 1. Objectives of FOCs and forestry companies^a

Which of the following statements correspond to the objectives of your company?	FOCs	Companies
To provide services to the members (clients) under the most attractive conditions	12	7
To provide services to the non-members (clients) under the most attractive conditions	7	na
To unite members	8	na
To earn a profit for a company	na	3
To earn a profit for the members	8	na
To pay the best market price for the timber to the members (PFOs)	7	3
To create more jobs	7	1
To maintain and manage forest holding	na	8
To invest in forestry	na	6

^a Considering different backgrounds, slightly different sets of statements to select from were provided to the FOCs and the forestry companies. Since all responses were merged in this table, some of the listed objectives do not apply to a particular group of entities, hence the not applicable (na) entries.

Ten out of 13 FOCs have several meetings per year to discuss the admission of the new members; two FOCs arrange meetings once per year on this issue. This frequency corresponds to the number of meetings when all FOC members are invited. Ten FOCs indicated applying an entrance membership fee, two did not respond and in one a fee is not applied. The fee ranges from €30 to €300. Ten FOCs also impose an annual membership fee (one does not), which also ranges from €30 to €300. Only in four cases was the annual membership fee reported to depend on the size of the forest holding.

The majority of the interviewed leaders (seven) of the forestry companies indicated employing a private forestry consultant (three do not, and two did not respond on this issue). The involvement of forestry companies in management of private forests is equally common through the purchases of stumpage and the 'management through long-term contracts' (five responses each).

How Do the FOCs Work?

The main services provided by the FOCs and the forestry companies include, but are not limited to: roundwood trade; stand preparation for harvesting (marking stand borders and preparing the necessary paperwork); organising timber harvesting (usually neither FOCs nor forestry companies employ their own loggers, but rather subcontract out timber harvesting and marketing); consulting services; reforestation; and preparation of forest management plans (Table 2).

The majority of respondents, both from FOCs and forestry companies (76.9% and 75% respectively), reported growth in an annual turnover while others reported it

was at a stable level. The annual turnover of FOCs ranges from below €30,000 (three responses) to about €100,000 (four responses) and up to €1 M (three responses).

Table 2. Main services provided by the FOCs and the forestry companies

Which of the following services do you provide to PFOs?	FOCs	Companies
Roundwood trade	11	7
Stand preparation for harvesting	9	7
Timber harvesting	7	7
Consulting services	4	4
Preparation of forest management plans	5	2
Reforestation/afforestation	3	3

Five FOCs have more than 20 clients to whom they provide services and who are not members of the FOC. Another five FOCs have between 6 and 20 such clients. Six forestry companies have more than 20 of these clients, and another four up to 10. Eight leaders of FOCs believe that the optimal number of clients using services of FOC should exceed 40. The vast majority of FOC leaders (12 out of 13) indicated that the number of clients served by an FOC had increased over the previous year.

Nine FOCs reported having from 11 to 20 clients to whom they sell timber; while nine forestry companies reported having more than 20 such clients. Eight FOCs and seven forestry companies reported the distance to clients to whom they sell timber as being in a range of 50 to 150 km. None of the FOCs trade with clients who are further away than 200 km.

Commonly members of the FOCs have an advantage (e.g. higher price for timber, various discounts for services, priority in servicing) compared to the non-member clients (reported in 12 cases).

Slightly more than half (seven) FOC leaders think that they are not competing with another FOC in the market. However, 12 out of 13 FOCs see themselves competing with other companies in the market providing forestry services. Only five leaders of forestry companies view themselves as competing with FOCs in servicing the clients. A majority of FOCs (12) also reported collaborating with another FOC in provision of services to PFOs.

Asked what attracts private forests owners to use the services of their company, nine leaders of the forestry companies indicated the 'good reputation of the company'. Eleven leaders of forestry companies believe that cooperation of PFOs through FOCs has a strong potential in the country (one did not respond on this issue).

DISCUSSION

This study obtained information from the leaders of all FOCs in Lithuania. The response rate was close to 90%, and considering that the leaders (elite) are the most knowledgeable on the actual situation, it may be assumed that an analysis of

responses would provide a relatively accurate, and at the moment the best available, description of a FOC in Lithuania.

One potential limitation of the study is that the questionnaires submitted to the representatives of the two groups of entities were not identical. Some of the questions were formulated directly to suite the context of FOCs and had to be adjusted when posed to the SFEs or other companies. However, it is unlikely that this could have introduced any serious distortions into the results of the study. First of all, the differences between questions were minor, and second, FOCs were the main focus of this study and information on other entities is only of a complementary and contextual nature.

Profile of a Typical Forest Owners' Cooperative in Lithuania

It seems that a typical FOC in Lithuania has been operating in the market for less than five years. A leader of a FOC is typically less than 40 years old, male and with a university degree in forestry. A FOC has up to 10 members and this number remains stable. A legal entity can join and become a member. A typical FOC also has about 20 clients to whom services are provided and the number of clients is increasing. However, it is considered that an optimal number of clients using the services of a FOC should not exceed 40. A FOC applies entrance and annual membership fees. Members of a FOC do not have much influence on the operational activities and decision-making of the entity. Their function is limited to discussing major strategic issues and considering new members during several meetings per year.

FOCs view providing services to their members under the most attractive conditions, uniting members and earning a profit for the members as their main objectives. The main activities of a FOC revolve around timber harvesting and trade. A FOC has up to 20 clients to whom they supply timber and these clients are located over a distance of 50 – 150 km. The annual turnover of a FOC is more than €100,000 and this figure is growing.

In the broader context of the private forestry sector, FOCs are collaborating rather than competing with other FOCs. However, FOCs face competition from other forestry companies in the market (usually reformed SFEs, which also have a mandate to provide services to PFOs). Contrary to the FOC leaders, FOCs are not viewed as competitors by other forestry companies. Forestry companies are confident, believing in their own 'good reputation', but are still positive towards FOCs indicating that the cooperation of PFOs through FOCs has good potential.

Forest Management through Cooperation: Development and Importance

The restructuring of the forest sector in Lithuania after regaining independence can be seen as a gradual evolutionary process, with privatisation as the main axis for change. Restitution of private forests to their former owners resulted in an emergence of problems, the addressing of which requires special efforts, skills and resources. As another study by the same authors indicated, PFOs in Lithuania are in need of assistance in managing their forests and would be willing to seek a professional service (Pivoriūnas and Lazdinis 2004). About a third of PFOs would trust the management of their forests to professionals, and one quarter was undecided on this issue. Up to now, only 14% of PFOs contacted in the above study have delegated the management of their forests to external bodies. There seems to be

a potential need for services in forest management, even though not always indicated so directly by the PFOs in Lithuania.

The process of cooperation in agriculture and forestry in Lithuania was rather slow after regaining independence in 1990. This may be partly explained by the legacy of the soviet system, when farmers were forced into collective farms where cooperation was inefficient and undermined by central planning. PFOs are thus reluctant to join cooperatives or associations and to give-up their newly acquired property rights. A review of the pre-World War II cooperation indicates, however, that cooperation developed rapidly even during the short period of independence between the two wars. The same trends, considering the previous experiences and traditions in cooperation, may also be anticipated in the near future, at least in the agricultural sector (Čaplikas and Ramanauskas 2001).

The development of cooperation in the forest sector may be impeded by several factors. First, the PFOs in Europe and in Lithuania are increasingly less interested in the economic aspects of forestry (Dudutis and Kupstaitis 2004, Kennedy and Koch 2004, Pivoriūnas and Lazdinis 2004, Ziegenspeck *et al.* 2004). Secondly, globalisation may result in European forestry being less competitive (Bowyer 2004, Commission of the European Communities 2005), and reduce the return rates to PFOs from forestry. With global purchasing, there is a danger that forest-product industries will move to cost-efficient suppliers, such as fast-growing industrial plantations (Siry 2003). Thirdly, the restructuring of state companies to participate actively in private forestry places FOCs in a disadvantaged position. It is difficult to compete with the state in the provision of services, as the SFEs or large private forestry companies have the advantage of a long established name, traditions, infrastructure, technical base and capital for investment.

However, despite a slow start under difficult conditions, the cooperation of PFOs in Lithuania seems to be improving. The Forest Owners' Association of Lithuania reports that the share of the market by FOCs in roundwood trade is rapidly increasing. In 2004, the share of roundwood traded by the members of Forest Owners' Association of Lithuania (largely cooperatives) was about 15-20% (over 1M m³) of total roundwood trade (INFOMEDIS 2004). Being relatively small in size and in administration, FOCs can be flexible and quick in decision-making, which gives them an advantage over the larger and more rigid forestry companies.

In general, cooperation of forest owners, their training and extension are viewed as effective tools in alleviating the negative impacts of the fragmented ownership structure (World Bank 2001). The Confederation of European Forest Owners provides a list of arguments of why forest owner's associations (or cooperatives) may be important in realising policy objectives in the private forest sector in future (CEPF 2005). The statement indicates that forest owner's associations: (1) are the best means to mobilise underutilised forest resources; (2) have the capacity to bundle small quantities of timber to meet the demand of wood and wood-based industries; and (3) are instrumental in the developing of stable operating conditions for the emerging number of new PFOs. Considering that in future forest management in general is expected to become even more complicated and will probably require a wider range of skills (UN ECE and FAO 2005), cooperation of PFOs in associations and cooperatives may be seen as a feasible solution. However, this solution is not readily available and requires considerable efforts backed by

substantial inputs of human and financial resources to facilitate cooperation of private forest owners.

CONCLUDING COMMENTS

Institutionalised cooperation in private forestry in Lithuania is in its initial stages although some positive signs of development may be observed. Forest owners' cooperatives are being established with the objective to operate in the private forestry sector. Currently, forest owners' cooperatives in Lithuania are interested in providing commercial services to private forest owners rather than in attracting larger numbers of forest owners as their members. In the provision of services the forest owners' cooperatives are competing with the state forest enterprises and large private forestry companies.

The increasing interest of society in the environmental and social benefits and services provided by forests, as well as everyone's right of access to forests in Lithuania and the globalisation of the timber and wood product markets imply that PFOs in the future will have to operate under higher production costs, even more intense competition and will face complex decision-making. In this context, cost-effective management approaches introducing economies of scale, as well as channels for dissemination and a flow of information in private forest management, will have to be developed if multifunctional and sustainable private forestry is to be maintained. Despite being an attractive solution to a range of problems, forest management through cooperation and consolidation of forest holdings may not be an easy task, considering the decreasing interests in economic aspects of forestry by contemporary private forest owners and society in general.

This study describes the FOCs in Lithuanian forestry as one of the post-soviet systems. Despite shedding some light on the private forest sector of this country, many questions have also been introduced. The results presented here may provoke an interest in the relations between FOCs and their members, posing questions such as why there are so few members in FOCs and whether the declared objectives of FOCs are not undermined by some hidden agendas. It also would be important to explore the role of the state in the development of the private forest sector since the regaining independence. All these questions deserve special attention and it is expected they will be addressed in future studies.

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